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INDEX OF SKYLAB DATA
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EREP Investigations 380

-9-
Contract NAS-13394

(E75-10041) INDEX OF SKYLAB DATA
AVAILABLE AT COLORADO SCHOOL OF MINES
(Colorado School of Mines) 32 p
HC \$3.75

N75-12410

CSCL 05B

Unclas

G3/43 00041

Geology Department
Colorado School of Mines
Golden, Colorado 80401

Original photography may be purchased from:
EROS Data Center
10th and Dakota Avenue
Sioux Falls, SD 57198

Remote Sensing Report 74-8

31 October 1974

REMOTE SENSING PROJECTS

DEPARTMENT OF GEOLOGY

COLORADO SCHOOL OF MINES ♦ GOLDEN, COLORADO

INDEX OF SKYLAB DATA
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Gary L. Prost

Remote Sensing Report 74-8

31 October 1974

CONTENTS

	Page
Explanation	1
Skylab Ground Tracks.	3
Total Skylab Data Coverage.	4
Total Skylab S190-A Photography	5
Total Skylab S190-B Photography	6
Total Skylab S-192 Imagery.	7
S-190A Photography.	8
S-190B Photography.	9
S-191 Imagery	10
Skylab 2 S-190A	11
Skylab 2 S-190A	12
Skylab 2 S-190B	13
Skylab 2 S-190B	14
Skylab 2 S-192.	15
Skylab 2 S-192.	16
Skylab 3 S-190A	17
Skylab 3 S-190A	18
Skylab 3 S-190B	19
Skylab 3 S-190B	20
Skylab 3 S-191.	21
Skylab 3 S-191.	22

	Page
Skylab 3 S-192.	23
Skylab 3 S-192.	24
Skylab 4 S-190A	25
Skylab 4 S-190A	26
Skylab 4 S-190B	27
Skylab 4 S-190B	28

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COLORADO SCHOOL OF MINES

EXPLANATION

This index is organized according to

I. Mission

A. Sensor

1. Track; date (or orbit; GMT start, stop)

- a. Format (including size, pos. or neg., spectral band, transparency or print, roll and frames, and cloud and snow information)

For each mission (Skylab 2,3, or 4) there is a page indexing each individual sensor, followed by a map showing the approximate coverage over Colorado for the sensor. The photography has endlap varying from zero to sixty percent.

'S190-A' refers to the Skylab 6-camera multiband system, where each camera has a six-inch focal length. Frames are 88 naut. mi. per side.

'S190-B' refers to the Skylab high-resolution earth terrain camera, which has an 18 inch focal length. Frames are 59 naut. mi. per side.

'S191' refers to analog tape and tracking film.

'S192' refers to a 13-channel multispectral scanner.

The scale of a 70mm (2.25 inch per side) S190-A frame is approximately 1:2,800,000; for a 9x9 inch S190-A frame it is ~1:700,000. The scale for the 4½x4½ inch S190-B frames is ~1:950,000; for a 9x9 inch S190-B frame it is ~1:475,000.

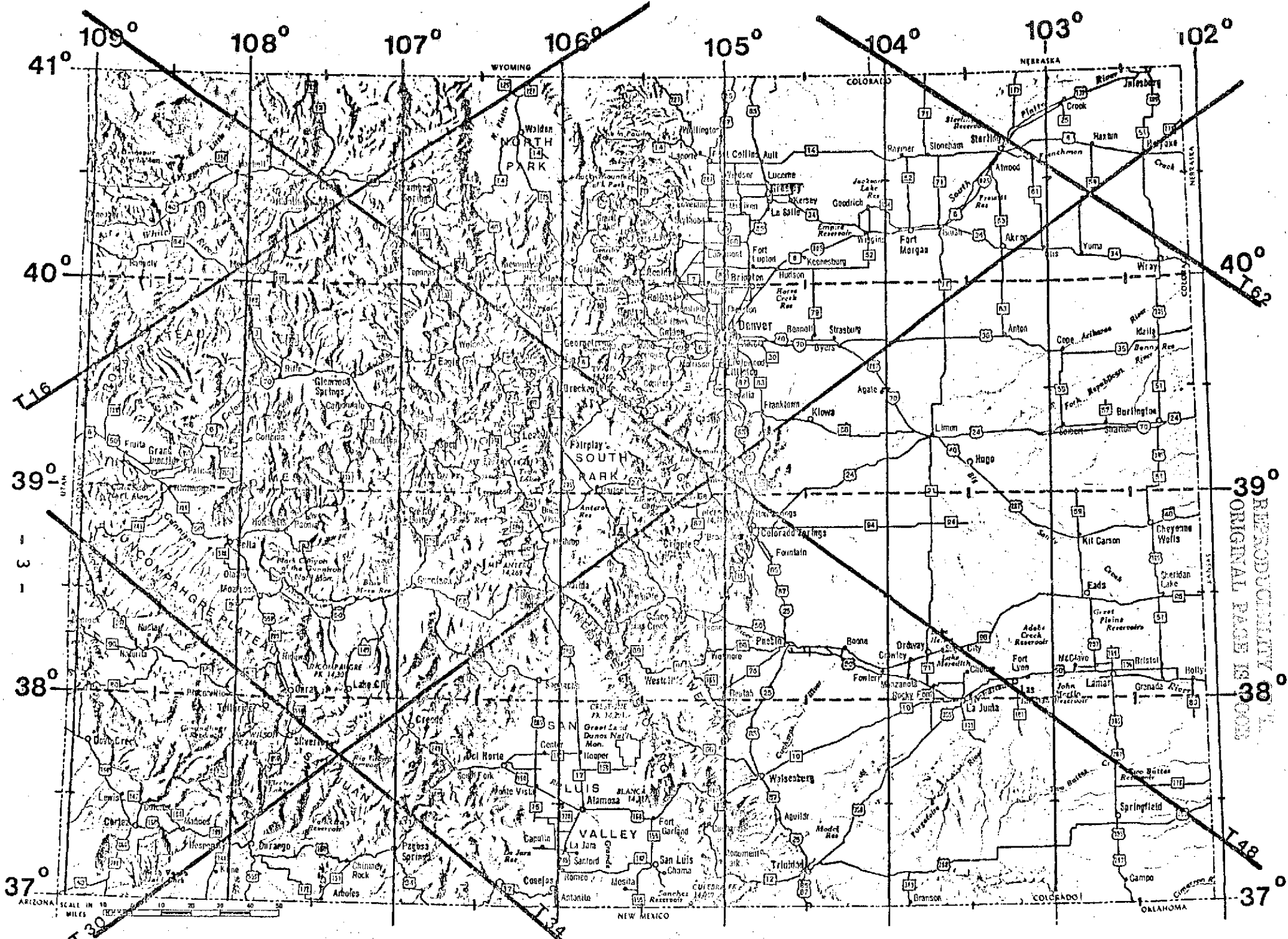
The S190-A spectral bands referred to as 'photo-IR, photo-IR, CIR, color, red, green' correspond to the wavelengths '700-830nm, >790nm, color-infrared, color, 600-700nm, and 490-600nm' respectively.

Channels 2,7, and 11 on the S192 correspond to the wavelengths 460-510nm, 780-880nm, and 1.55 to 1.75 μ m, respectively.

The term 'roll' followed by a number is the NASA film magazine identification.

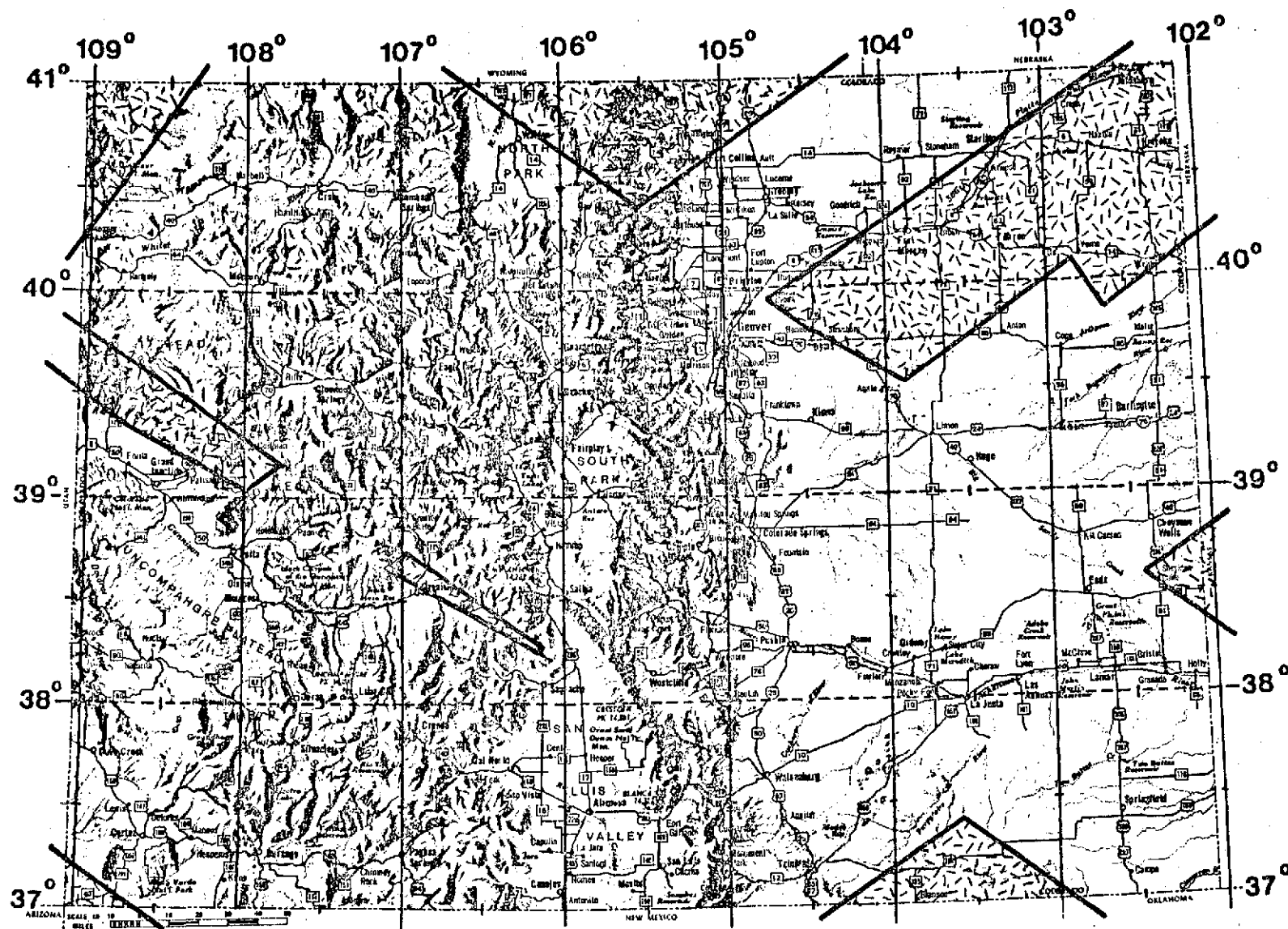
The term 'orbit' means the same as the term 'pass'.

GMT (Greenwich Mean Time) start a:b:c:d or GMT stop a:b:c:d refers to the time that a pass started and ended. The 'a' refers to the day of the year (begin counting at Jan. 1=1), 'b' refers to the hour of the day (0 = midnight), 'c' refers to the minute, and 'd' refers to the second. Mountain Standard Time is equal to G.M.T. minus 7 hours; Mountain Daylight Time is G.M.T. minus 6 hours.

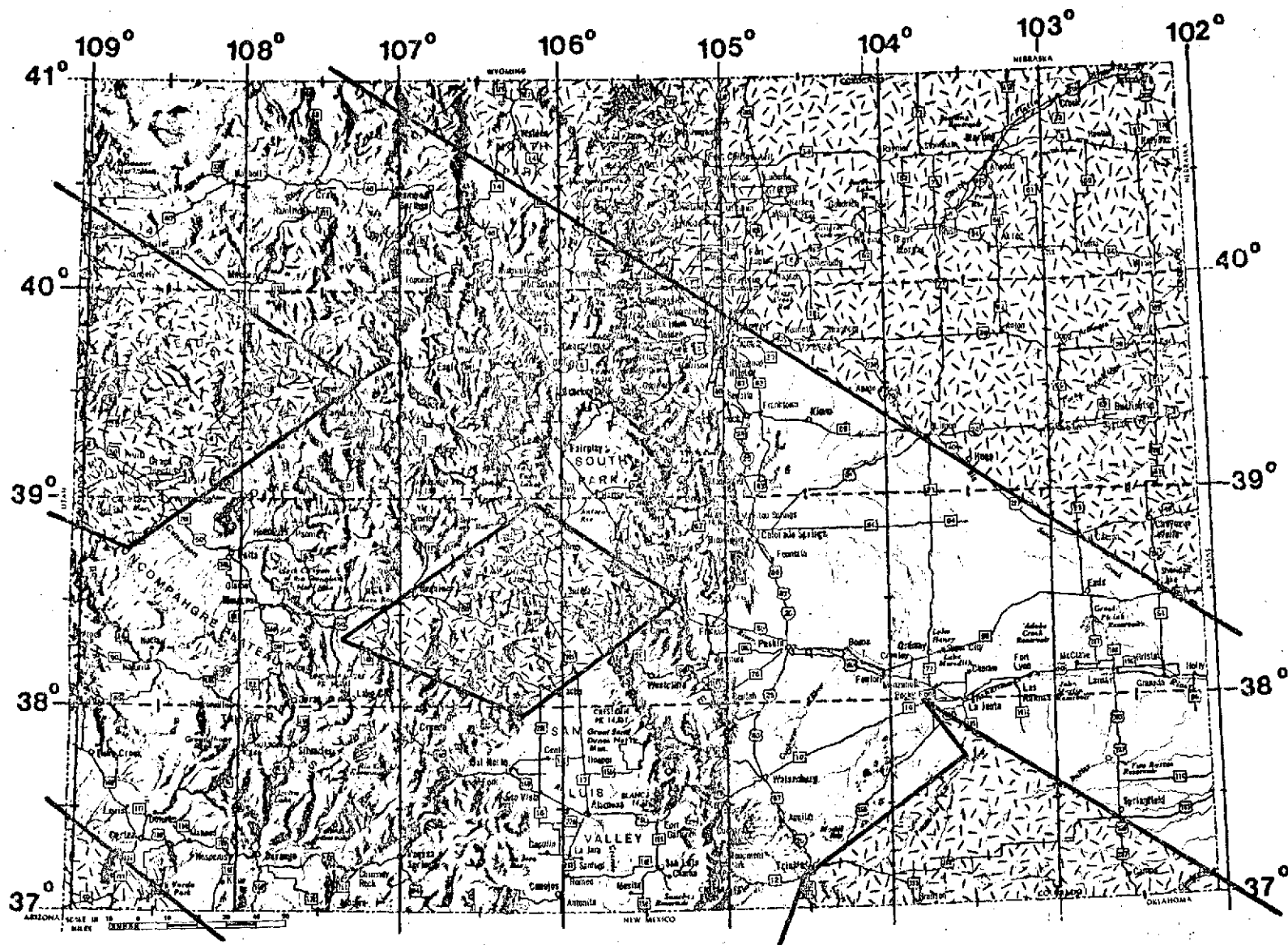


Skylab Ground Track

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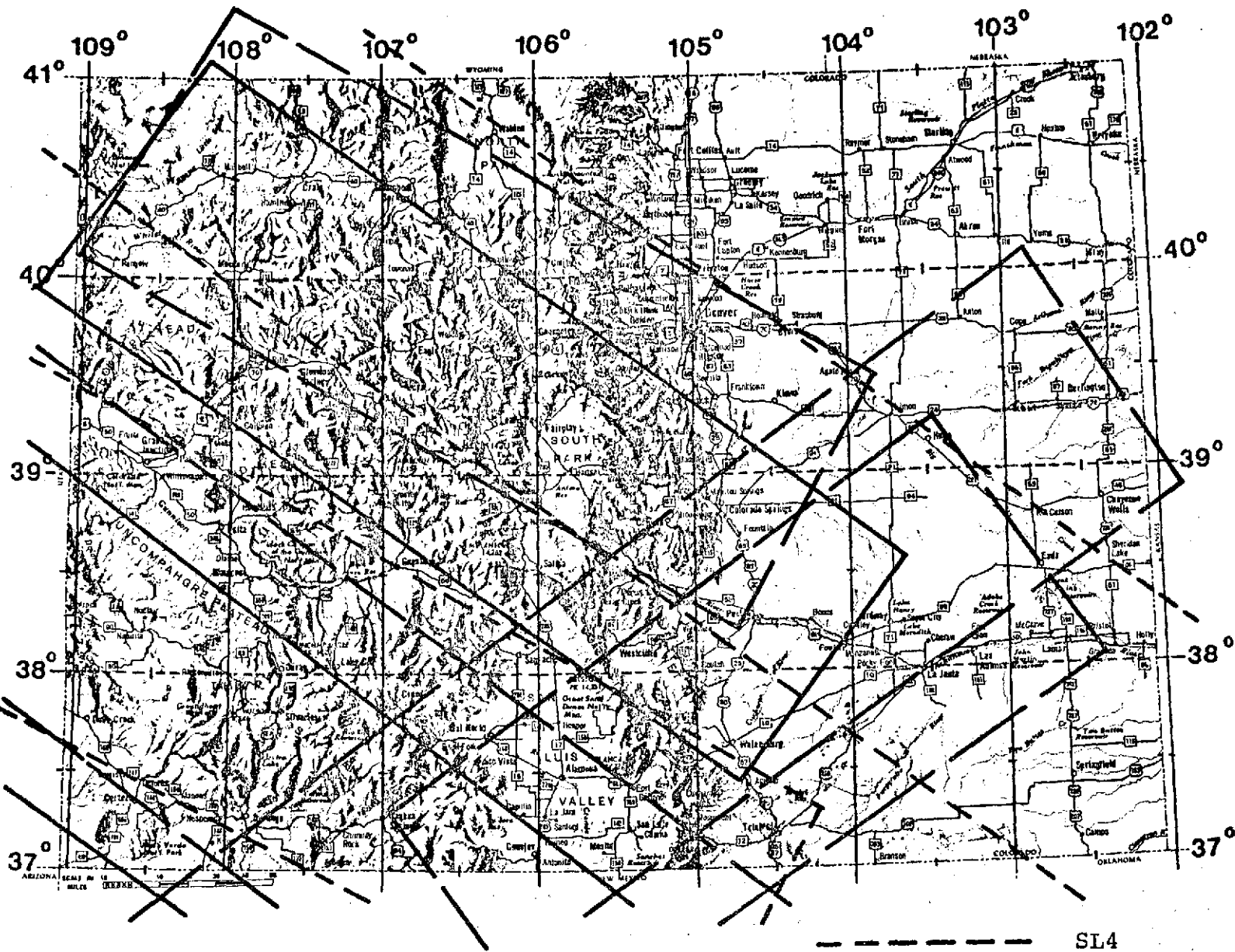
TOTAL SKYLAB
DATA COVERAGE



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TOTAL SKYLAB

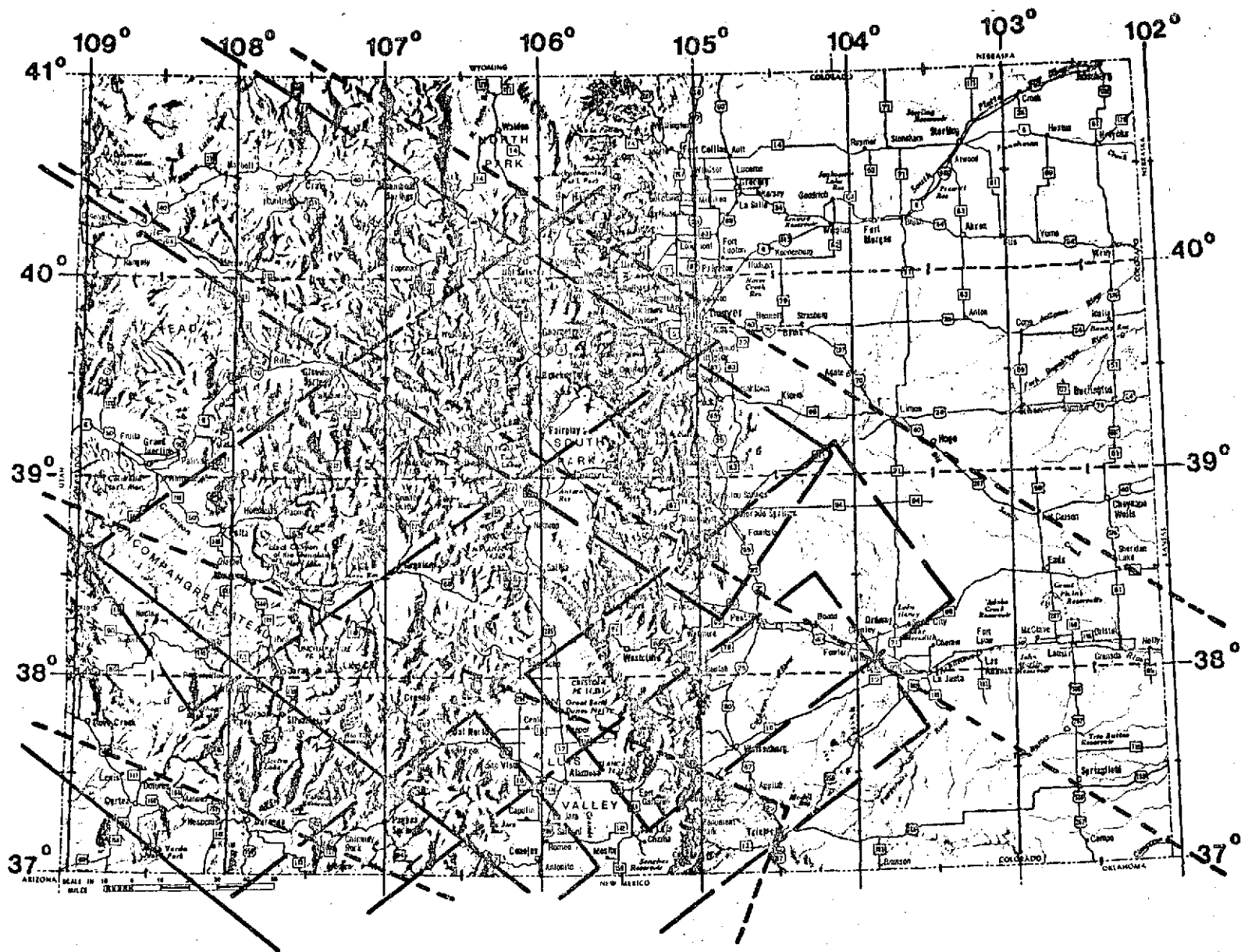
S-190B PHOTOGRAPHY



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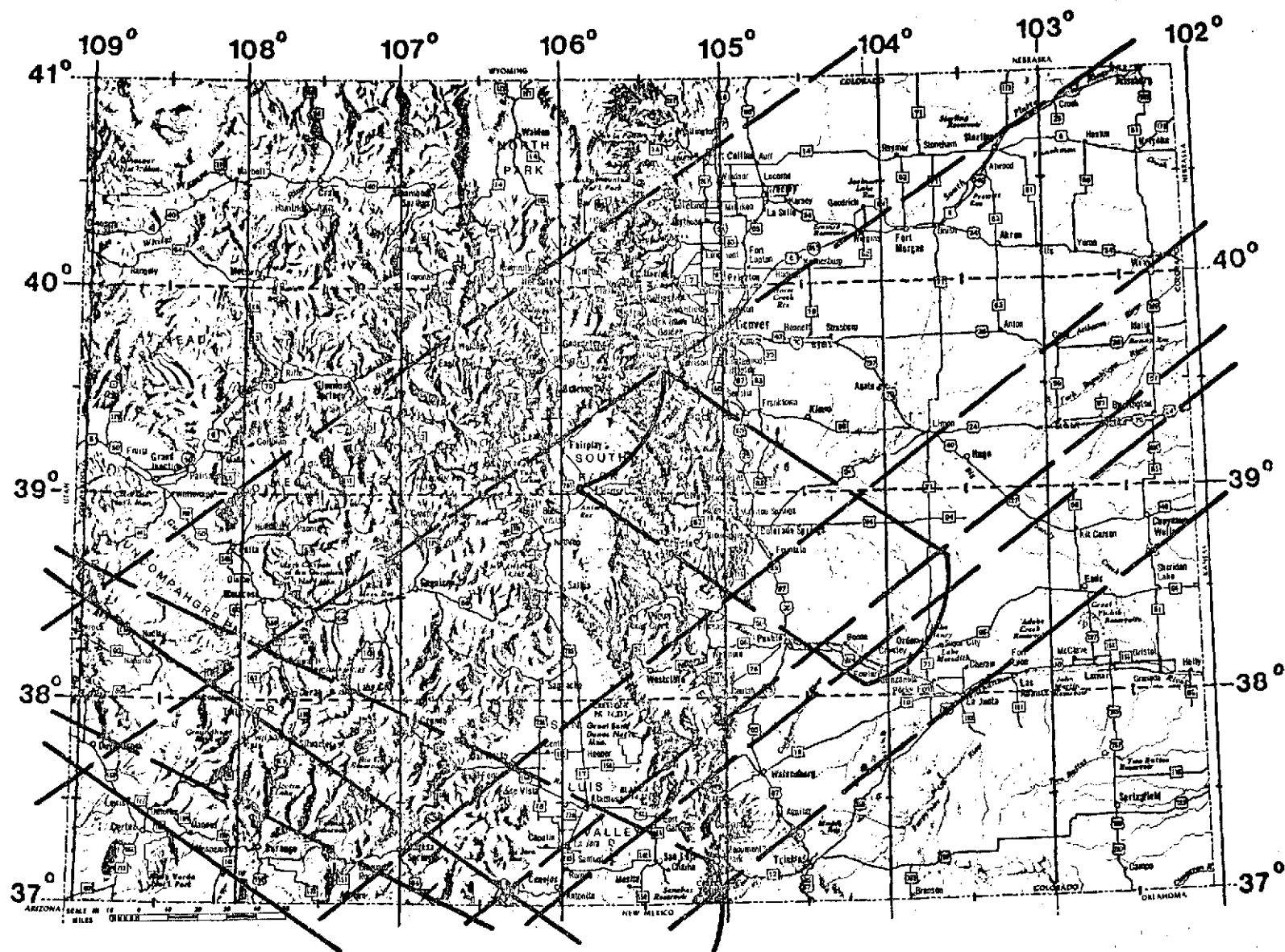
S-190A PHOTOGRAPHY

----- SL4
----- SL3
----- SL2



S-190B PHOTOGRAPHY

----- SL4
 _____ SL3
 _____ SL2



S-191 IMAGERY

----- SL4
 _____ SL3
 _____ SL2

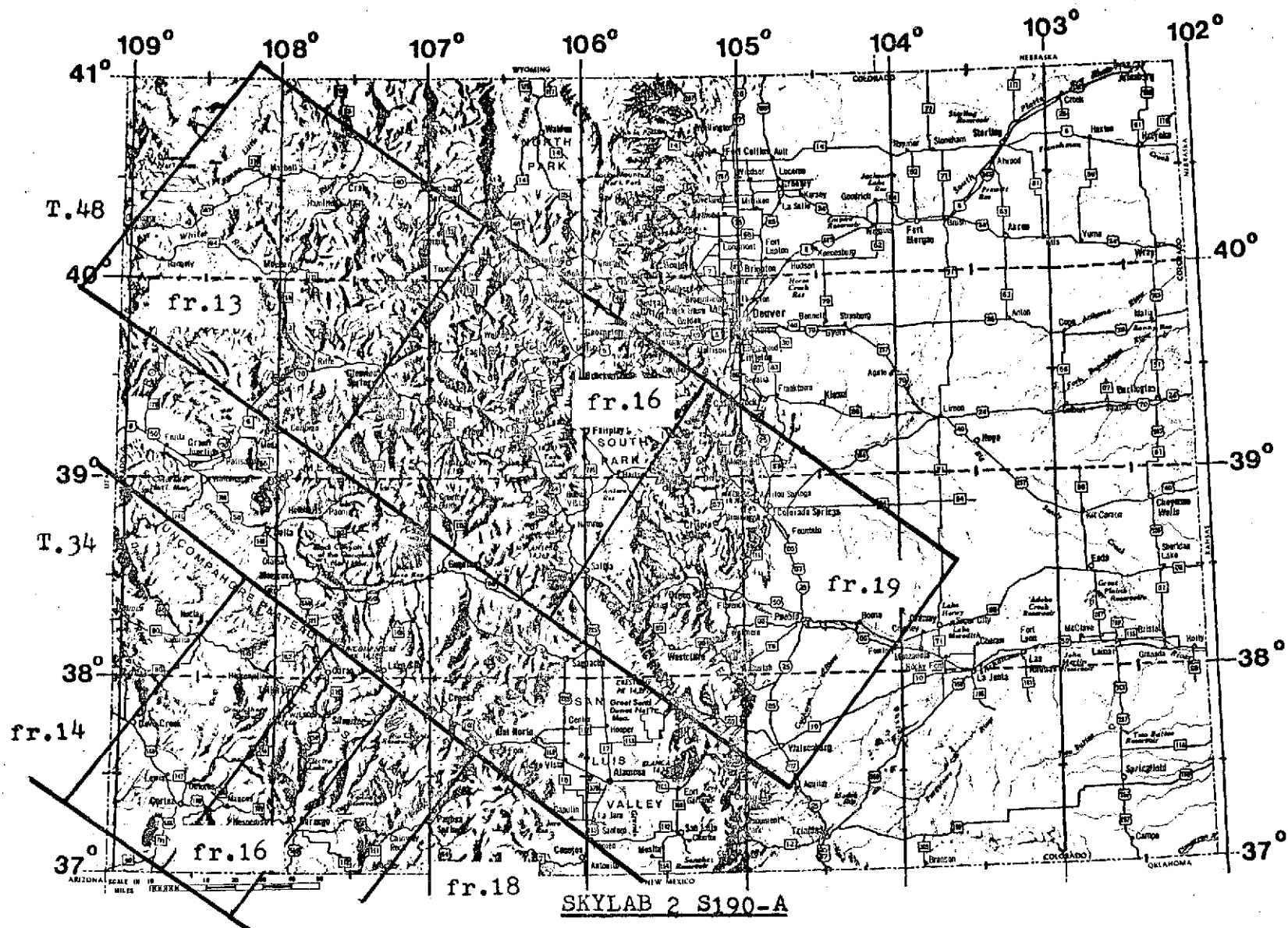
I.A. SKYLAB 2 S-190A

1. Track 34, 5 June 73

- a. 70mm pos. & neg. transparencies, rolls 7,8,9,10,11, and 12 (photo-IR, photo-IR, CIR, color, red, and green bands respectively), frames 12-20. Snow-covered above 11,000 ft. About 10% cloud cover.
- b. 7x8" B/W, color, CIR prints of rolls 7-12.
- c. 9x9" pos. & neg. trans. of rolls 7-12. 2 each of color & CIR.

2. Track 48, 11 June 73

- a. 70mm pos. & neg. trans., rolls 13-18 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 11-28. Snow-covered above 11,000 ft. About 10% patchy clouds.
- b. 7x8" B/W, color, CIR prints of rolls 13-18.
- c. 9x9" pos. & neg. trans. of rolls 13-18. 2 each of color & CIR.
- d. 9x9" pos. print; 18x18" pos. print; 27x27" pos. print, roll 17, frame 17 (enlargements of central Colorado area).



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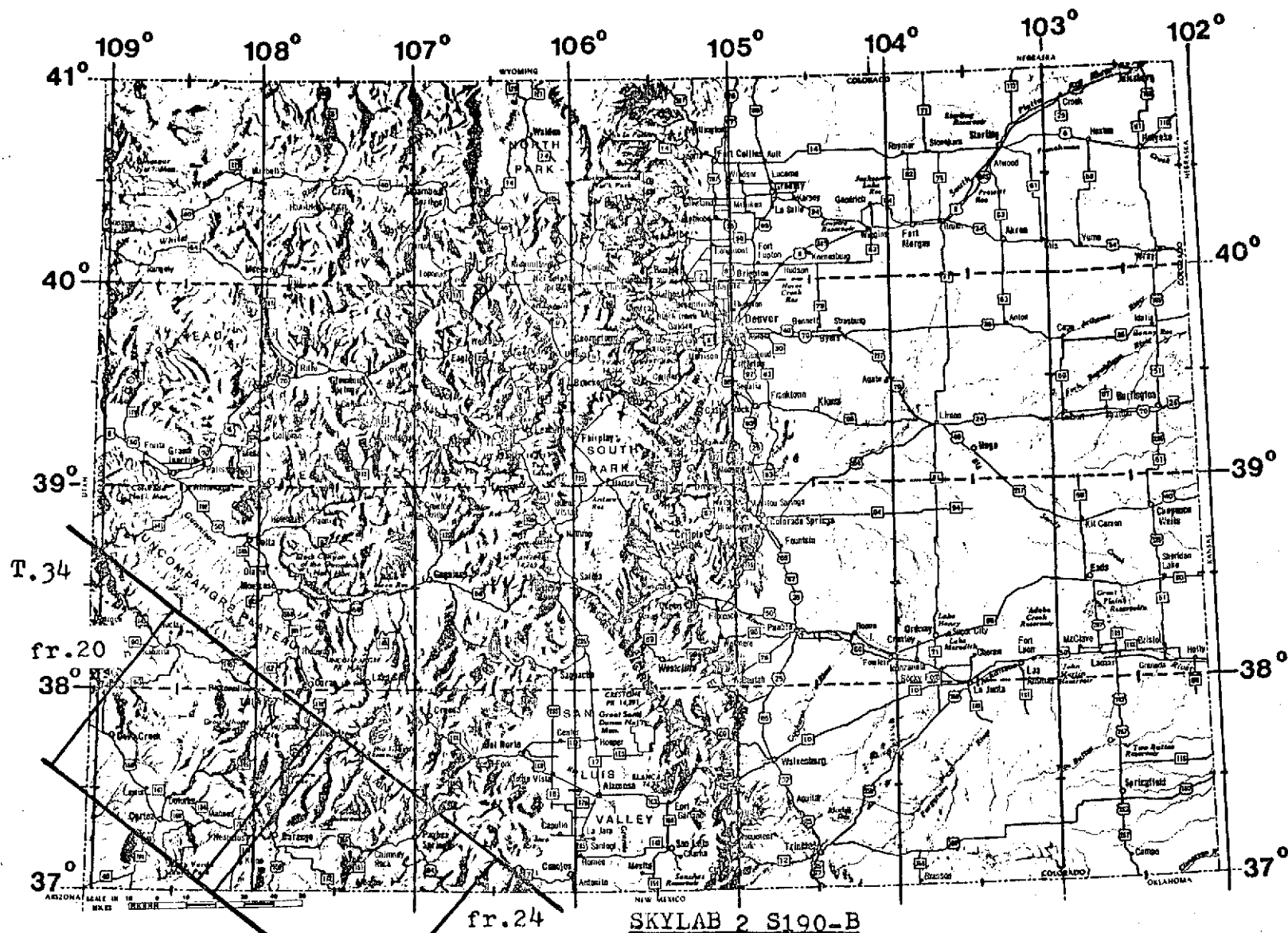
SKYLAB 2 S190-A

T.34, 5 Jn 73, rolls 7-12, fr.12-20. Snow above 11,000 ft.; about 10% cloud cover.
T.48, 11 Jn 73, rolls 13-18, fr.11-28. " " " " " " " " " " " "

I.B. SKYLAB 2 S-190B

1. Track 34, 5 June 73

- a. $4\frac{1}{2} \times 4\frac{1}{2}$ " pos. trans., color, roll 81, frames 16-27.
Snow over 11,000 ft. About 10% cloud cover.
- b. 9x9" pos. trans., color, 2 each.
- c. 9x9" pos. prints, color.

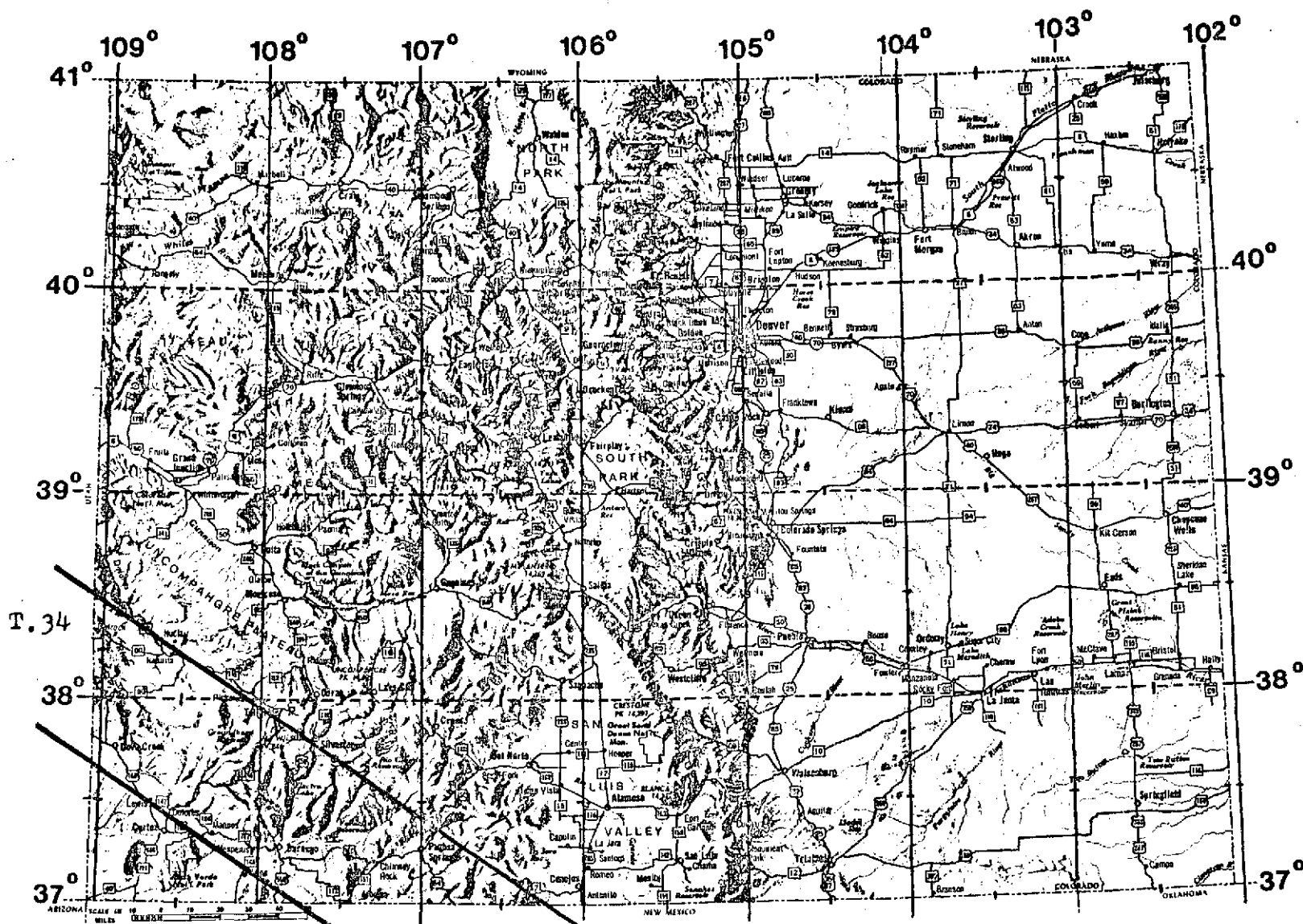


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T.34, 5 Jn 73, roll 81, fr.16-27. Snow above 11,000 ft.; about 10% cloud cover.

I.C. SKYLAB 2 S-192

1. Track 34, 5 June 73, Orbit 5; GMT start 156:17:57:02,
GMT stop 156:18:02:52.
 - a. 1x6" pos. trans. "screening film", channels 2,7,
and 11. Snow above 11,000 ft. About 10% cloud
cover.
 - b. 8x10" pos. prints, "screening film", channels 2,
7, and 11.



SKYLAB 2 S192

T.34, 5 Jun 73, Orbit (Pass) 5, GMT start 156:18:02:52, GMT stop 156:17:57:02.
Snow above 11,000 ft.; about 10% cloud cover.

II.A. SKYLAB 3 S-190A

1. Track 30, 6 Sept. 73

- a. 70mm pos. & neg. trans., rolls 31-36 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 248-256. No snow. About 25% cloud cover east of Colo. Spgs.
- b. 9x9" pos. trans., rolls 31-36. 2 each of color and CIR.
- c. 9x9" pos. prints, 2 each of all rolls.

2. Track 30, 16 Sept. 73

- a. 70mm pos. & neg. trans., rolls 43-48 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 61-73. No snow. Totally cloud-covered east of Pueblo.
- b. 9x9" pos. trans., rolls 43-48. 2 each of color and CIR.
- c. 9x9" pos. prints, 2 each of all rolls.

3. Track 34, 3 Aug. 73

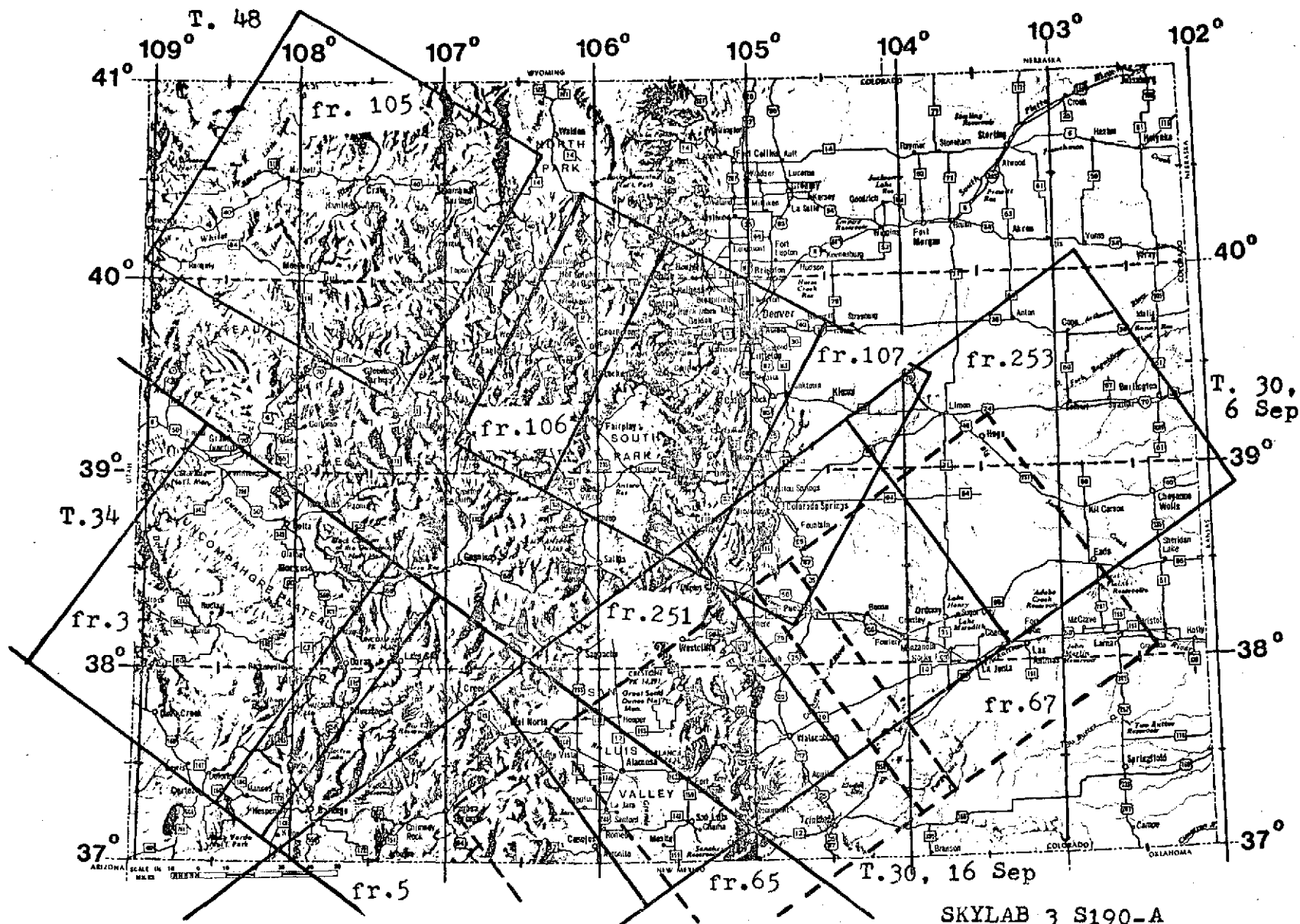
- a. 70mm pos. & neg. trans., rolls 19-24 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 1-9. No snow. About 20% patchy clouds over San Juans.
- b. 9x9" pos. trans., rolls 19-24. 2 each of color and CIR.
- c. 9x9" pos. prints, 2 each of all rolls.

4. Track 48, 4 Aug. 73

- a. 70mm pos. & neg. trans., rolls 19-24 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 102-113. Minor snow. About 20-40% patchy clouds over mountains.
- b. 9x9" pos. trans., rolls 19-24. 2 each of color and CIR.
- c. 9x9" pos. prints, 2 each of all rolls.

5. Track ?, Date ?, Cape Mendocino, Calif.

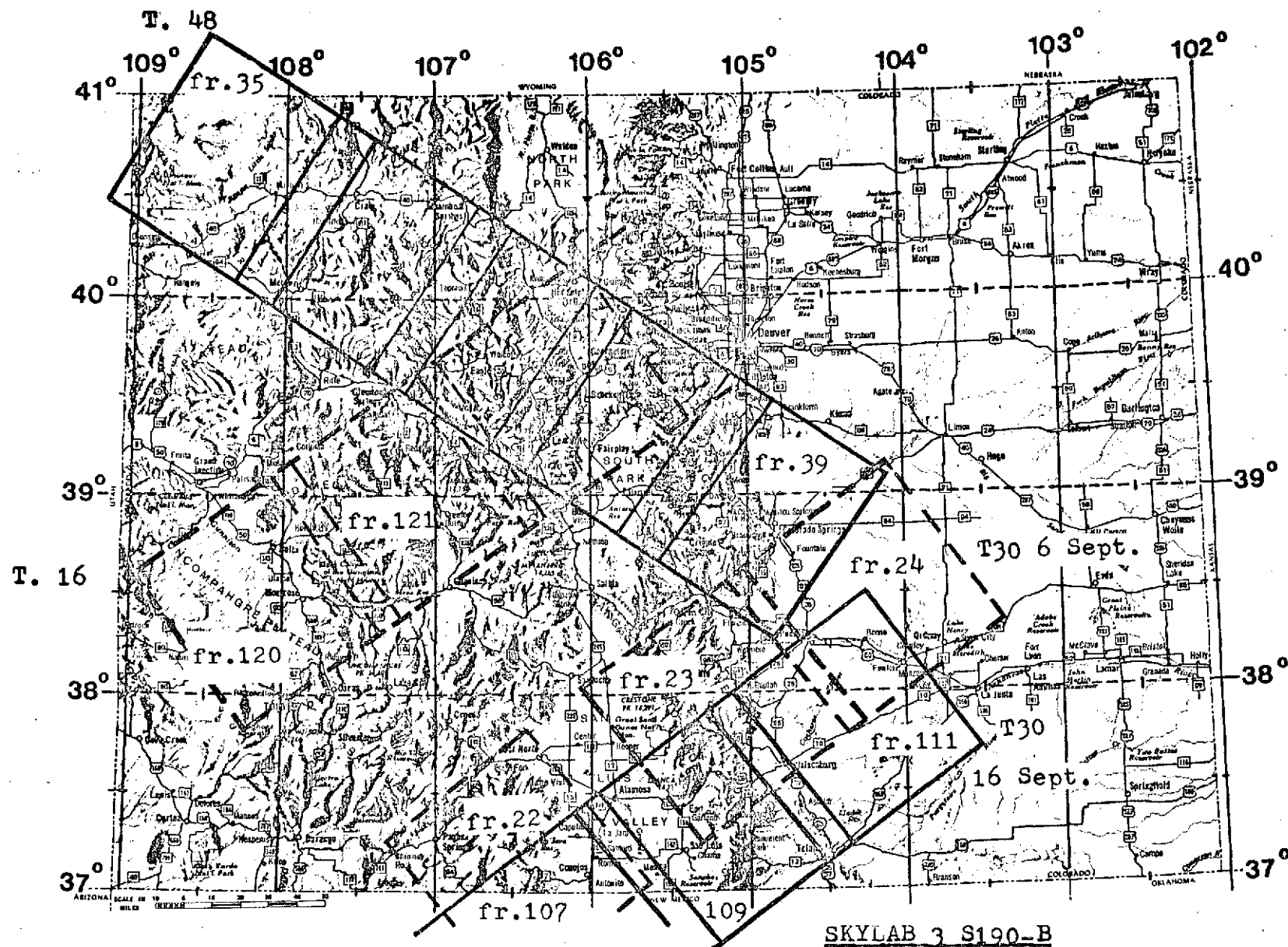
- a. 70mm pos. & neg. trans., rolls 31-36 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 336-345. Clouds over coast.
- b. 9x9" pos. trans., rolls 31-36. 2 each of color and CIR.
- c. 9x9" pos. prints, 2 each of all rolls.



T. 30, 6 Sep 73, rolls 31-36, fr. 248-256.	No snow; about 25% cloud cover east of Colo. Spgs.
T. 30, 16 Sep 73, rolls 43-48, fr. 61-73.	" " ; 100% clouds east of Pueblo.
T. 34, 3 Aug 73, rolls 19-24, fr. 01-09.	" " ; patchy clouds over San Juans.
T. 48, 4 Aug 73, rolls 19-24, fr. 102-113.	" " ; 20-40% clouds over mountains.

II.B. SKYLAB 3 S-190B

1. Track 16, 15 Sept. 73
 - a. 4½x4½" pos. trans., CIR, roll 87, frames 117-127.
No snow. 100% cloud cover east of Kremmling/Georgetown.
 - b. 9x9" pos. prints, CIR, 2 each.
2. Track 30, 6 Sept. 73
 - a. 4½x4½" pos. trans., color, roll 86, frames 19-28.
No snow. About 25% clouds east of Colo. Spgs. Gap over San Luis Valley.
 - b. 9x9" pos. prints, color, 2 each.
3. Track 30, 16 Sept. 73
 - a. 4½x4½" pos. trans., color, roll 88, frames 103-123.
No snow. 100% cloud cover east of Pueblo.
 - b. 9x9" pos. prints, color, 2 each.
4. Track 48, 4 Aug. 73
 - a. 4½x4½" pos. trans., color, roll 83, frames 33-45.
Minor Snow. 30-50% patchy clouds.
 - b. 9x9" pos. prints, color, 2 each.

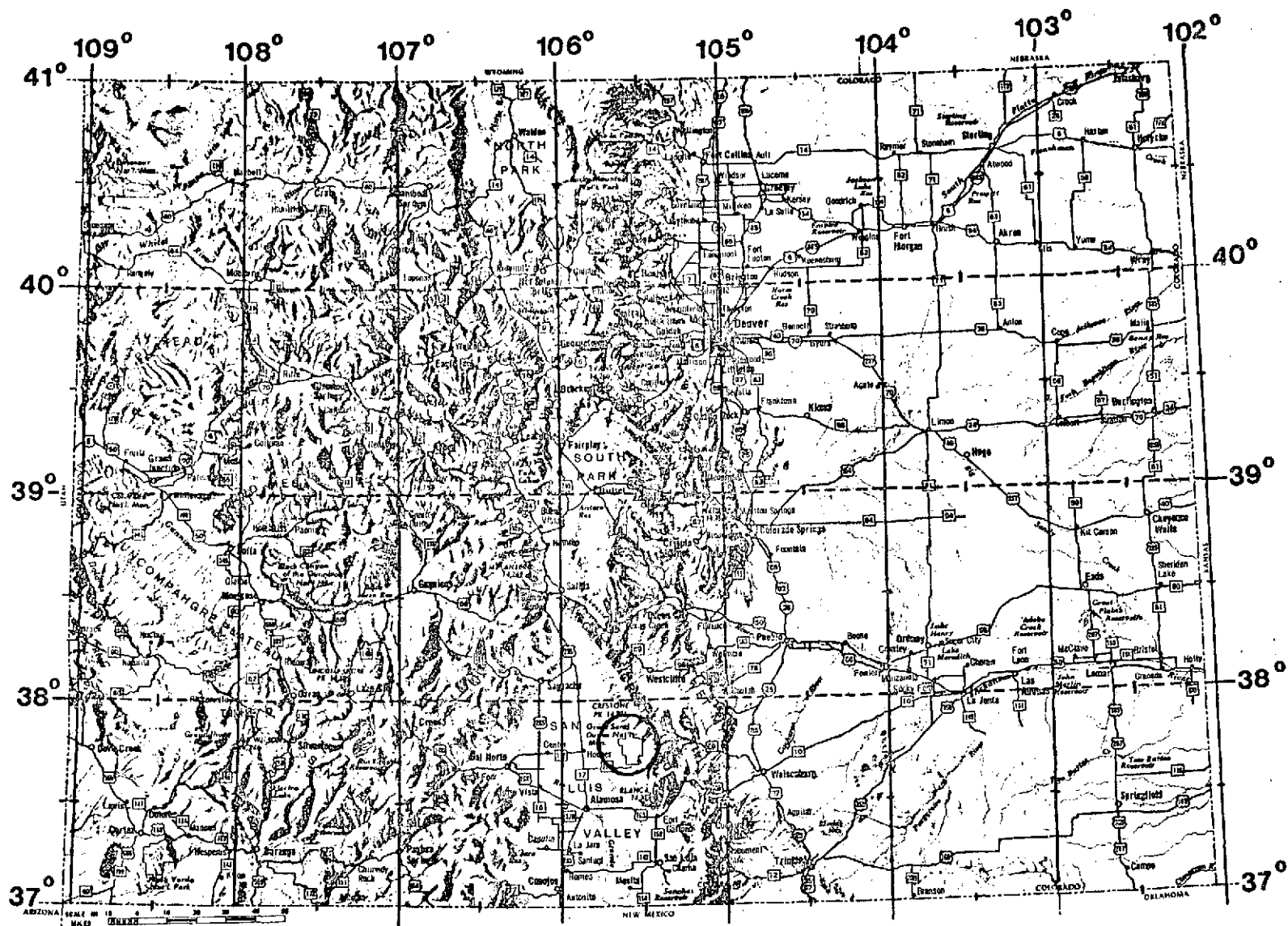


T.16, 15 Sep 73, roll 87, fr.117-127.
 T.30, 6 Sep 73, roll 86, fr. 19- 28.
 T.30, 16 Sep 73, roll 88, fr.103-123.
 T.48, 4 Aug 73, roll 83, fr. 33- 45.

No snow; 100% clouds east of Kremmling/Georgetown.
 No snow; about 25% cloud cover east of Colo. Spgs.
 No snow; 100% cloud cover east of Pueblo.
 Minor snow; 30-50% patchy clouds.

II.C. SKYLAB 3 S-191

1. Track 30, 16 Sept. 73, Orbit 45; GMT start 259:17:22:09,
GMT stop 259:17:27:04.
 - a. Analog tape and 16mm tracking film, Great Sand Dunes.
No snow, no clouds.

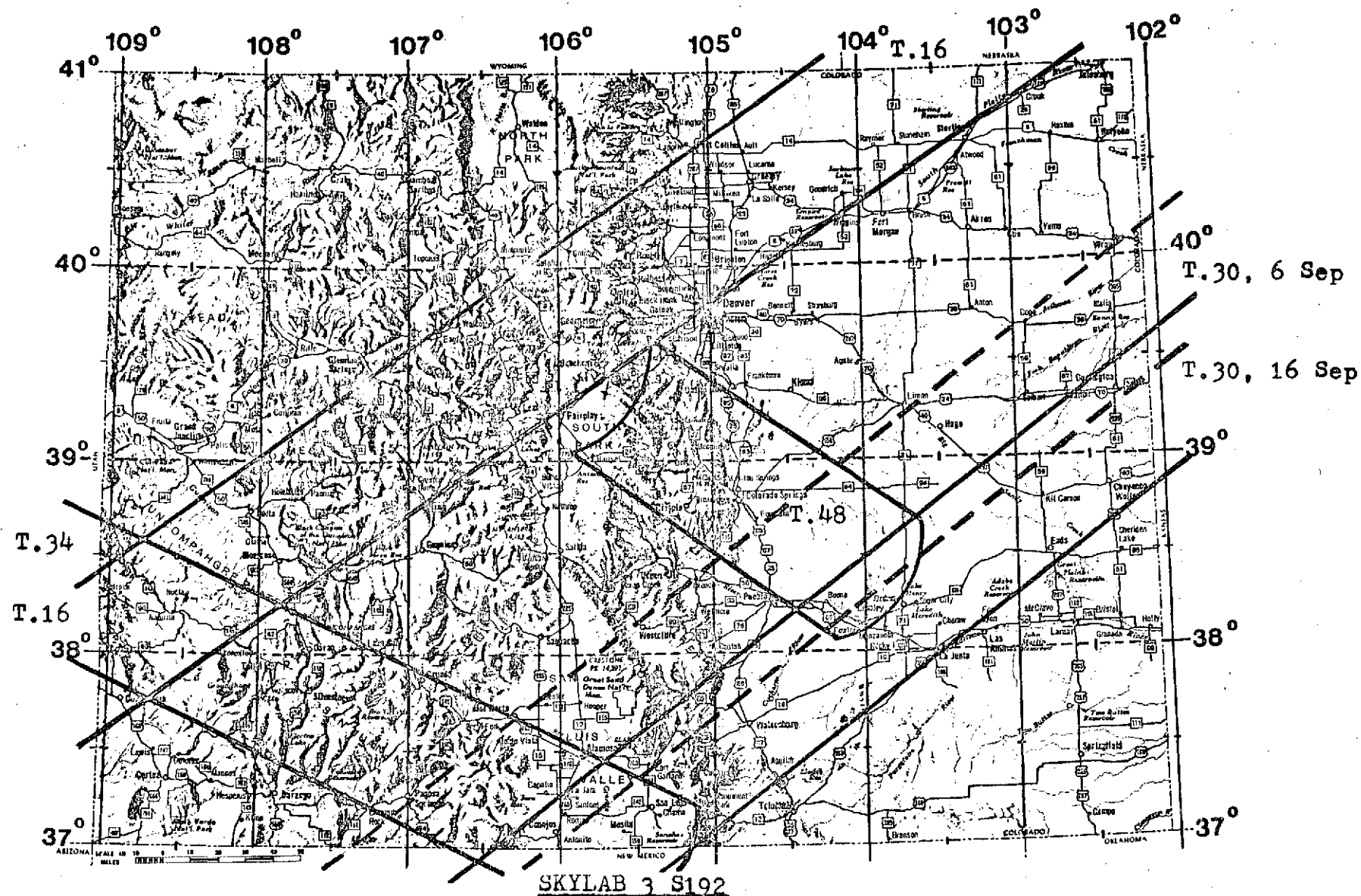


SKYLAB 3 S191

Orbit (Pass) 45, 16 Sep 73. Great Sand Dunes. No snow; no clouds.

II.D. SKYLAB 3 S-192

1. Track 16, 21 Sept. 73, Orbit 43; GMT start 264:18:06:50, GMT stop 264:18:08:31.
 - a. 4" wide roll, pos. trans., channels 2,7,11, uncorrected "screening film". No snow. No clouds.
2. Track 30, 6 Sept. 73, Orbit 27; GMT start 249:21:26:14, GMT stop 249:21:27:38.
 - a. 4" wide roll, pos. trans., channels 2,7,11, uncorrected "screening film". No snow. About 25% clouds east of Colo. Spgs.
3. Track 30, 16 Sept. 73, Orbit 45; GMT start 259:17:23:29, GMT stop 259:17:25:04.
 - a. 4" wide roll, pos. trans., channels 2,7,11, uncorrected "screening film". No snow. 100% clouds east of Pueblo.
4. Track 34, 3 Aug. 73, Orbit 12; GMT start 215:18:02:21, GMT stop 215:18:04:05.
 - a. 4" wide roll, pos. trans., channels 2,7,11, uncorrected "screening film". No snow. About 25% patch clouds over San Juans.
5. Track 48, 4 Aug. 73, Orbit 13; GMT start 216:17:19:30, GMT stop 216:17:20:05.
 - a. 4" wide roll, pos. trans., channels 2,7,11, uncorrected "screening film". Minor snow. Patchy clouds over mountains.



T.16,	21 Sep 73,	Orbit 43,	GMT start 264:18:06:50,	GMT stop 264:18:08:31.	No snow; no clouds.
T.30,	6 Sep 73,	Orbit 27,	GMT start 249:21:26:14,	GMT stop 249:21:27:38.	No snow; 25% " , Colo. Spg
T.30,	16 Sep 73,	Orbit 45,	GMT start 259:17:23:29,	GMT stop 259:17:25:04.	No snow; 100% " , Pueblo.
T.34,	3 Aug 73,	Orbit 12,	GMT start 215:18:02:21,	GMT stop 215:18:04:05.	No snow; 25% patchy clouds.
T.48,	4 Aug 73,	Orbit 13,	GMT start 216:17:19:30,	GMT stop 216:17:20:05.	Minor snow;

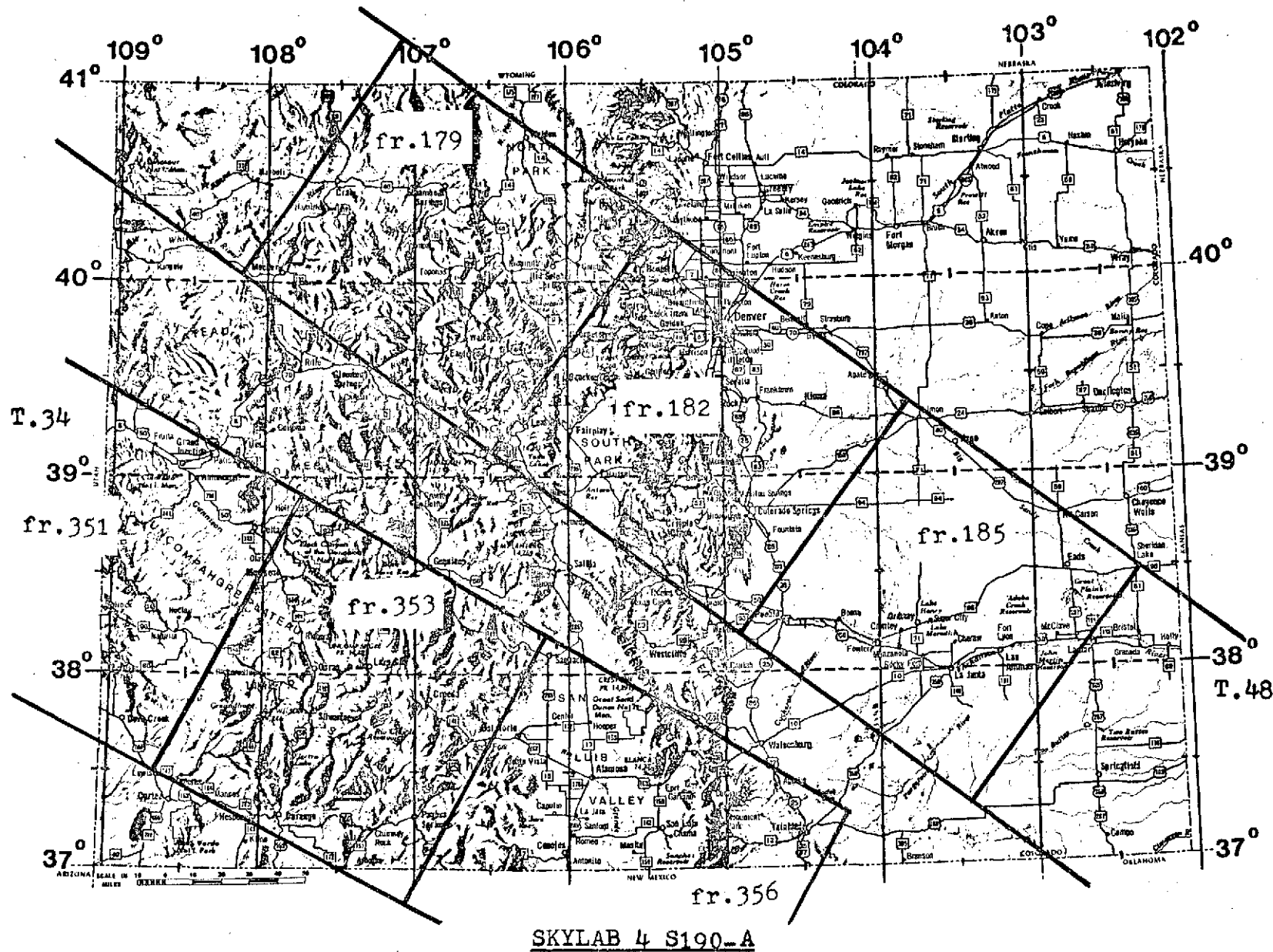
III.A. SKYLAB 4 S-190A

1. Track 34, Jan. 74

- a. 70mm pos. & neg. trans., rolls 73-78 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 350-356. Snow-covered above 7,000 ft. 0-20% clouds.
- b. 9x9" pos. trans., rolls 73-78, frames 350-356. Two each of color and CIR.

2. Track 48, Jan. 74

- a. 70mm pos. & neg. trans., rolls A1-6 (photo-IR, photo-IR, CIR, color, red, green, respectively), frames 176-188. Snow-covered above 7,000 ft. Up to 60% patchy and wispy clouds in places.
- b. 9x9" pos. trans., rolls A1-6, frames 176-188. Two each of color and CIR



T.34, Jan 74, rolls 73-78, fr. 350-356. Snow above 7,000 ft.; 0-20% clouds.
 T.48, Jan 74, rolls A1- 6, fr. 176-188. Snow above 7,000 ft.; up to 60% patchy clouds.

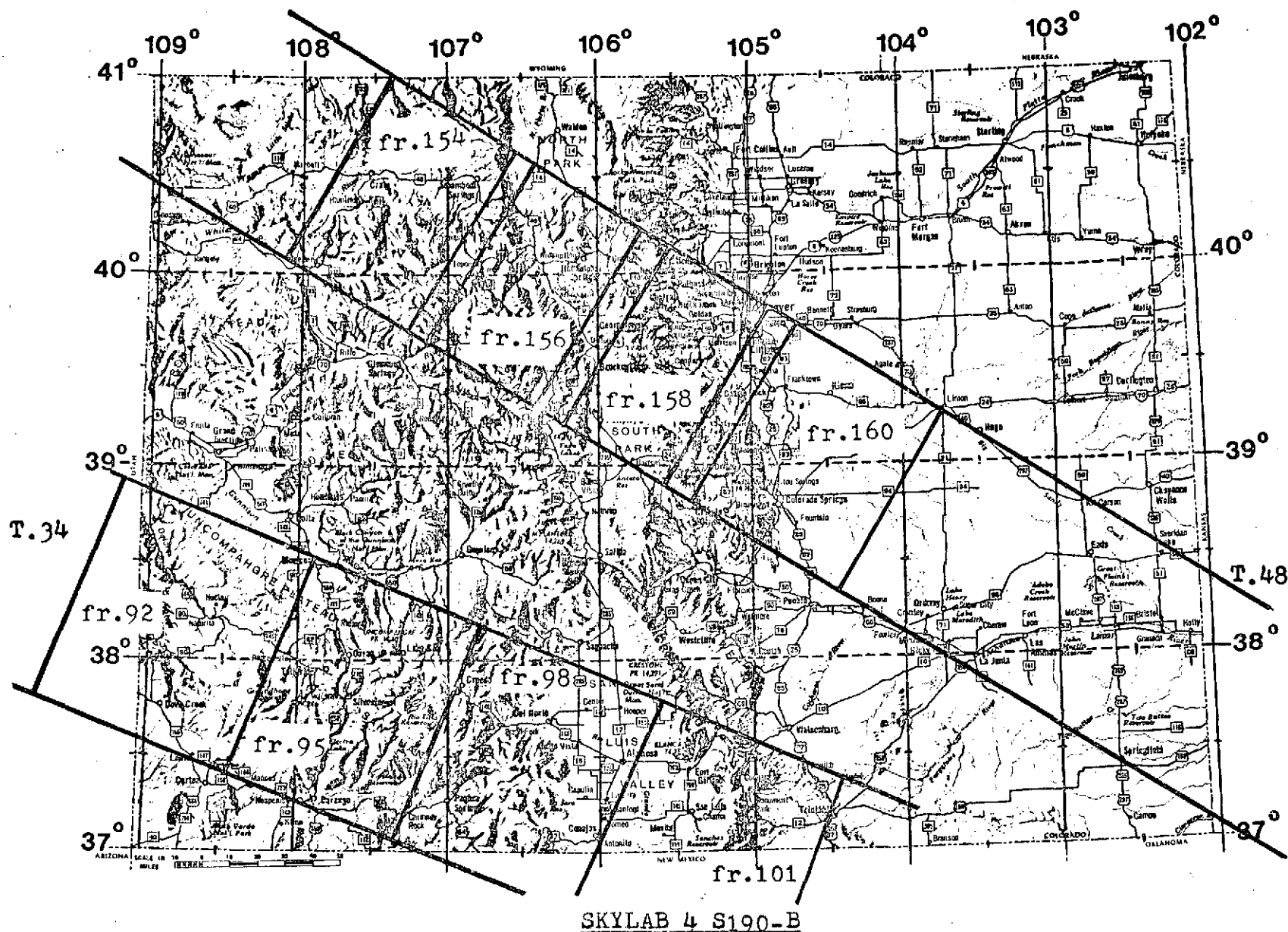
III.B. SKYLAB 4 S-190B

1. Track 34, Jan. 74

- a. 4½x4½" pos. trans., color, roll 94, frames 90-101.
Snow over 7,000 ft. 0-20% clouds.
- b. 9x9" pos. prints, color, 2 each.

2. Track 48, Jan. 74

- a. 4½x4½" pos. trans., color, roll 94, frames 151-168.
Snow over 7,000 ft. Up to 60% local clouds.
- b. 9x9" pos. prints, color, 2 each.



T.34, Jan 74, roll 94, fr.90-101. Snow above 7,000 ft.; 0-20% clouds.
 T.48, Jan 74, roll 94, fr.151-168. Snow above 7,000 ft.; up to 60% patchy clouds.